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09/854,137	05/11/2001	Lauren L'Esperance	1585/A25	6797
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BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			TRAN, CON P	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/854,137	<b>Applicant(s)</b> L'ESPERANCE ET AL.	
	<b>Examiner</b> Con P. Tran	<b>Art Unit</b> 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04/18/05.  
2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.  
4a) Of the above claim(s) 22-53 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claim 4** is rejected under 35 U.S.C. 102(e) as being anticipated by Gould et al. U.S. Patent 6,839,669 (hereinafter, "Gould").

Regarding **claim 4**, Gould teaches an audio recorder (105, see Figs 1, 1A, 2, and respective portions of the specification), for interfacing with a speech recognition system, the recorder comprising:

a microphone (205, Fig. 2) that produces an output signal representative of an input audio signal (col. 6, lines 21-39);

a record control (200, Fig. 2) that causes the recorder to create a new recording file (230) for storing data representative of the output signal, and to begin storing data in the recording file (in memory 220; col. 6, lines 21-39);

a stop control (200, Fig. 2) that causes the recorder to stop storing data in the recording file and that ends the recording file (col. 8, lines 1-7); and

a recording file memory for storing recording files (memory 220; col. 6, lines 21-39).

3. **Claims 8-9** are rejected under 35 U.S.C. 102(e) as being anticipated by Qureshey et al. U.S. Patent Application Publication US 2002/0072326 (hereinafter, "Qureshey").

Regarding **claim 8**, Qureshey teaches an audio recorder (130, see Figs 1, 3C, and respective portions of the specification) for interfacing with a speech recognition system [0014], the recorder comprising:

a recorder housing (101, Fig. 1) containing the recorder (130, [0037]) including a microphone (250, Fig. 2) that produces an output signal representative of an input audio signal [0044]; and

a recorder interface display (112, Fig. 1, 310, Fig. 3C) on the surface of the housing (101) that displays for a user information regarding the current state of the recorder [e.g., playback mode 0046], wherein the language of the information displayed is changeable by the user [e.g. English, French; Fig. 3C; 0050].

Regarding **claim 9**, Qureshey further teaches an audio recorder according to claim 8, further comprising a speech recognition system interface connection [0014]

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such that the speech recognition system allows the user to change the language of the information displayed [e.g., voice command; 0050].

4. **Claims 13-15, and 19-21** are rejected under 35 U.S.C. 102(e) as being anticipated by Comerford et al. U.S. Patent 6,748,361 (hereinafter, "Comerford")

Regarding **claim 13**, Comerford teaches an audio recorder (including hardware engine 3100 of PSA, Fig. 3; see Figs. 1, 2, 4, 3, 5, and respective portions of the specification) for interfacing with a speech recognition system (including application interface library 1420, col. 4, line 57 – col. 5, line 22; spoken language engine 3200, Fig. 3), the recorder comprising:

an internal microphone (5120, Fig. 5) that produces an output signal representative of an input audio signal (col. 7, lines 8-17);

a recording file recorder that stores data representative of the output signal (including nonvolatile memory 4415, Fig. 4, col. 6, line 60 –col. 7, lines 7; col. 5, lines 39-48);

an external interface (serial port 3030, Fig. 3) that allows an external recording file containing data representative of an audio signal (e.g., commands, col. 12, 34-47) to be input to the recorder for storage (e.g., hard disk, ROM, flash memory; update data representative of command and name of applications; col. 13, 30-44; col. 13, line 60 – col. 14, line 21); and

a recording file manager (spoken language engines 3200) that allows a user to store and manage a plurality of recording files in the recorder (col. 6, lines 52-59).

Regarding **claim 14**, Comerford further teaches a recording file player (audio recording and playback engine 3230, Fig. 3) that produces an audible output representative of a user selected recording file (col. 6, lines 47-59).

Regarding **claim 15**, Comerford further teaches a text-to-speech module (text to speech converter 3240, Fig. 3) so that an external recording file may contain text (col. 7, lines 54-60).

Regarding **claim 19**, Comerford further teaches wherein an external recording file may be an alphanumeric paging (i.e., broadcasting) message (from PDA to through serial port 4060, Fig. 4; col. 9, line 52 – col. 10, line 8).

Regarding **claim 20**, Comerford further teaches an audio recorder according to claim 13, wherein the user may record a recording file for insertion into an existing recording file (by pressing microphone button 4160; col. 8, lines 8-16).

Regarding **claim 21**, Comerford further teaches wherein the recording file

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manager allows recording files to be linked together for common processing (engine manager 3020 adds additional information before passing to interpreter 3010 for normal message handling; col. 8, lines 13-25.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould et al. U.S. Patent 6,839,669 (hereinafter, "Gould") in view of Tran U.S. Patent 6,070,1440.

Regarding **claim 5**, Gould teaches an audio recorder (105, see Figs 1, 1A, 2, and respective portions of the specification) to claim 4. However, Hampton does not disclose wherein the recording file memory contains at least one file for receiving new vocabulary.

Tran teaches audio recorder (Fig. 14; col. 10, lines 41-52) in which recording file memory contains at least one file for receiving new vocabulary (new words; col. 27, lines 50-55; col. 28, lines 33-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the system vocabulary of Tran teaching with audio recorder of Gould to obtain an audio recorder as claimed for purpose of providing a robust and efficient human-machine interface is provided for recognizing speaker independent, continuous speech, as suggested by Tran in column 3, lines 10-12.

**Claim 6**, Gould in view of Tran further teaches wherein the recording file memory contains at least one folder for receiving new vocabulary (e.g., street names, telephone numbers of PIM directory book; see Tran, col. 2, lines 26-36; col.27, lines 50-55).

7. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Comerford et al. U.S. Patent 6,748,361 (hereinafter, "Comerford") in view of Tanaka et al. JP 07-085585 (hereinafter, "Tanaka").

Regarding **claim 7**, Comerford teaches an audio recorder (including hardware engine 3100 of PSA, Fig. 3; see Figs. 1, 2, 4, 3, 5, and respective portions of the specification) for interfacing with a speech recognition system (including application interface library 1420, col. 4, line 57 – col. 5, line 22; spoken language engine 3200, Fig. 3), the recorder comprising:

an internal microphone (5120, Fig. 5) that produces an output signal representative of an input audio signal (col. 7, lines 8-17);



a jack for an external microphone (5110) that allows the external microphone to produce the output signal representative of the input audio signal (col. 7, lines 8-17);

a recording file recorder that stores data representative of the output signal (nonvolatile memory 4415, Fig. 4, col. 6, line 60 –col. 7, lines 7; col. 5, lines 39-48) and an indication of the microphone used to produce the output signal (e.g., “microphone on” or others can be created differently, col. 8, lines 31-43).

However, Comerford does not explicitly disclose disables the internal microphone when an external microphone is plugged into the jack.

Tanaka discloses inside microphone (34) is not operated when an outside microphone plug is inserted in jack (21, see Abstract, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a disabling internal microphone of Tanaka teaching with audio recorder of Comerford for purpose of sharing enabled device, as suggested by Comerford in column 4, lines 53-56.

8. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Qureshey et al. U.S. Patent Application Publication US 2002/0072326 (hereinafter, “Qureshey”) in view of Williams III et al. U.S 4,771,472 (hereinafter, “Williams”).

Regarding **claim 10**, Qureshey teaches an audio recorder according to claim 8. Qureshey teaches volume control (110) controls the gain of the amplifier 222 (Fig. 2,

[0041]. However, Qureshey does not further disclose an automatic gain control (AGC) circuit that automatically adjusts amplification of the microphone output signal.

Williams discloses an apparatus for improving voice intelligibility in high noise environments having AGC circuits (22, 24, Fig. 3) that automatically adjust amplification of microphone (12) output signal (col. 6, lines 40-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated an AGC circuit of Williams teaching with audio recorder of Qureshey for purpose of increasing intelligibility of voice signals in high noise environments, as suggested by Williams in column 2, lines 44-46.

9. **Claims 11 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Qureshey et al. U.S. Patent Application Publication US 2002/0072326 (hereinafter, "Qureshey") in view of Williams III et al. U.S. Patent 4,771,472 (hereinafter, "Williams"), and further in view of Hawthorne U.S. Patent 4,785,291.

Regarding **claim 11**, Qureshey in view of Williams teaches an audio recorder according to claim 10. Williams further discloses when signals level is below threshold of fast AGC, slow AGC provides output (col. 10, lines 34-44); and when signals level exceeds higher threshold of fast AGC, output of slow AGC is cutoff (col. 10, lines 50-58). However, Qureshey in view of Williams does not further disclose wherein the recorder interface display indicates to the user when the audio signal is outside the range of the AGC circuit.

Hawthorne discloses a receiver generating an AGC signal as an output and this signal is supplied to the monitor circuitry which detects its level and generates appropriate audible and visual indications as a function of that level (col. 2, lines 4-19). Hawthorne further discloses as AGC signal exceeds a maximum predetermined threshold (i.e., corresponding range), the final LED bar lights continuously and the beeps merge into a single strident tone indicating an out-of-range (i.e., corresponding AGC threshold) condition (visual alarm 21, acoustic alarm 22; Fig. 2; col. 2, lines 20-33; col. 4, lines 39-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a visual alarm and an acoustic alarm of Hawthorne teaching with audio recorder of Qureshey, Williams combination so that the recorder interface display indicates to the user when the audio signal is outside the range of the AGC circuit for purpose of providing quantized visual and audible indicia based on received signal strength, as suggested by Hawthorne Abstract.

**Claim 12** also met in view of above discussion (acoustic alarm 22; Fig. 2).

10. **Claims 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Comerford et al. U.S. Patent 6,748,361 (hereinafter, "Comerford") in view of Qureshey et al. U.S. Patent Application Publication US 2002/0072326 (hereinafter, "Qureshey")

Regarding **claim 16**, Comerford teaches an audio recorder according to claim 15. However, Comerford does not explicitly disclose wherein an external recording file may be an e-mail message.

Qureshey discloses an audio recorder (130, see Figs 1, 3C, and respective portions of the specification) in which an external recording file may be an e-mail message (from site 602, Fig. 6; [0063])

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated an email teaching of Qureshey recorder with audio recorder of Comerford so that an external recording file may be an email message as claimed for purpose of providing lower cost, lower power consumption, less maintenance, as suggested by Qureshey in paragraph [0009].

Regarding **claim 17**, Qureshey further teaches an audio recorder according to claim 16, wherein a user may audibly respond to the e-mail message via the microphone (sending digitized speech to site 602; [0063])

Regarding **claim 18**, Qureshey further teaches an audio recorder according to claim 17, wherein the response may be transcribed to text and attached to the e-mail message (by converting speech to text, [0063]).

11. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hampton et al U.S. Patent 6,594,633 (hereinafter, "Hampton") in view of Badie et al. U.S. Patent 5,268,965 (hereinafter, "Badie").

Regarding **claim 1**, Hampton teaches audio recorder (20, Fig. 1) for interfacing with a speech recognition system (via external interface 42 with other computer having speech recognition software installed; col. 4, lines 1-9; col. 5, lines 19-39), the recorder comprising:

a microphone (24, Fig. 1) with noise cancellation, the microphone producing an output signal representative of the audio signal sensed by the microphone.

However, Hampton does not explicitly disclose the audio recorder having an open front port that senses an audio signal and a closable back port which when open senses an audio signal; and

a mode selector switch having:

a first position for a close-talking mode in which the back port is open so that audio signals are sensed through both the front port and the back port so as to reduce representation of environmental noise in the output signal, and

a second position for a conference-talking mode in which the back port is closed so that audio signals are sensed through the front port only and environmental noise is not reduced.

Badie discloses a noise-cancelling microphone apparatus 302 (see Figs 2a, 3a, 5). The microphone comprises a housing (510) and a sound transducer (502) mounted

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within the housing (510). The housing has first (514) and second sides (512) and the transducer (502) has first (304) and second sound ports (308) coupled to the first (514) and second sides (512) of the housing respectively. The microphone (302) also includes a mounting clip (310) coupled to one side of the housing (512) in the proximity of one of the sound ports (308). The mounting clip (310) is intended for mounting the microphone (302) to a user so as to substantially close the sound port (308) when microphone (302) is attached (col. 3, line 64 – col. 4, line 12). Furthermore, the blocking of the rear port (308) may be accomplished by a switch, preferably mechanical. The operator activates a mechanical switch which results in the rear port (308) being blocked (col. 3, lines 39-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the microphone apparatus of Badie teaching with audio recorder of Hampton such that to obtain an audio recorder that can be selected mode of operations as claimed for purpose of minimizing performance degradation of directional microphones when used remotely, as suggested by Badie in column 4, lines 20-22.

12. **Claims 2-3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampton et al U.S. Patent 6,594,633 (hereinafter, "Hampton") in view of Badie et al. U.S. Patent 5,268,965 (hereinafter, "Badie"), and further in view of Tran U.S. Patent 6,070,1440.

Regarding **claim 2**, Hampton in view of Badie teaches audio recorder according to claim 1. However, Hampton in view of Badie does not disclose wherein the output signal is compressed by the recorder and the second position of the mode selector switch causes greater compression than the first position.

Tran teaches audio recorder (Fig. 14; col. 10, lines 41-52) in which resulting data may be compressed to reduce the storage and transmission requirements (col. 8, lines 56-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the compression technique of Tran teaching with audio recorder of Badie, Hampton so that output signal is compressed by the audio recorder and when blocking rear port of the microphone (no noise cancellation resulting larger data) having greater compression (i.e., in the second position of the mode selector switch causes greater compression than the first position) for purpose of reducing storage, as suggested by Tran in column 8, lines 56-67.

Regarding **claim 3**, Tran further teaches wherein the output signal is amplified by the recorder (col. 8, lines 56-62) and when blocking rear port of the microphone (no noise cancellation thus need increasing gain) having greater amplification (i.e., the second position of the mode selector switch causes greater amplification than the first position).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Con P. Tran whose telephone number is (571) 272-7532. The examiner can normally be reached on M - F (8:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Vivian C. Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306; and 571-273-8300 effective July 15, 2005.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cpt *CPJ*  
July 19, 2005

  
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